

**ELLIOTT P. TANOS**

1                   **DELMARVA POWER & LIGHT COMPANY**  
2                   **REBUTTAL TESTIMONY OF ELLIOTT P. TANOS**  
3                   **BEFORE THE DELAWARE PUBLIC SERVICE COMMISSION**  
4                   **CONCERNING AN INCREASE IN ELECTRIC BASE RATES**  
5                   **DOCKET NOS. 09-414/09-276T**

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7     **1. Q: Please state your name and position, and business address.**

8     **A:**        My name is Elliott P. Tanos. I am Manager, Cost Allocation for Pepco  
9                   Holdings, Inc. (PHI). I am testifying on behalf of Delmarva Power & Light  
10                  Company (Delmarva or the Company). My business address is 401 Eagle Run  
11                  Road, Newark, Delaware.

12    **2. Q: Have you previously submitted direct testimony in this case?**

13    **A:**        Yes. I filed Direct Testimony sponsoring the Company's Class Cost of  
14                  Service Study (COSS). My Schedule EPT-1 provided the line-item assignment of  
15                  each component of rate base, revenues, and operating expenses to the respective  
16                  customer classes, including assignment of approximately \$890 million of  
17                  distribution system assets. My Schedule EPT-2 detailed the unbundled customer-  
18                  related and demand-related cost components by class.

19    **3. Q: What is the purpose of your rebuttal testimony?**

20    **A:**        The purpose of my Rebuttal Testimony is to respond to cost of service  
21                  issues discussed in the testimony of Staff Witness Solganick.

22    **4. Q: Have you reviewed the comments of Staff Witness Solganick on page 14**  
**relating to updating the Company's COSS?**

23    **A:**        Yes, I have. Staff Witness Solganick recommends two key updates to the  
24                  cost of service study in his Direct Testimony starting on page 14, line 26: namely,

1           that the COSS should be updated to allocate Account 369-Services on a customer  
2           basis consistent with Company policies, and that the rate of return requested in  
3           this case should be applied in the cost study. He also suggests that the Company  
4           may be able to address additional issues within the cost study.

5       **5. Q: Have you quantified the effect on the Company's cost of service study from**  
6       **these Staff recommendations?**

7       **A:**       Yes, I have. My Schedule EPT R-1 shows the effect on the class rates of  
8           return that results from reassigning Account 369- Services on a customer basis  
9           consistent with Company policies, and updating the COSS using the requested  
10          overall rate of return. This schedule also reflects the other post-filing corrections  
11          referenced in Staff Witness Solganick's Direct Testimony and as identified in my  
12          response to data requests. The overall effect of these changes on the class rates of  
13          return are highlighted for the residential classes below:

		Rate of Return (%)	
	<u>Customer Class</u>	Filed COSS	Revised COSS
16	<b>Residential</b>	<b>6.34</b>	<b>5.98</b>
17	<b>Residential Non-Heating</b>	<b>6.58</b>	<b>6.04</b>
18	<b>Residential Heating</b>	<b>5.85</b>	<b>5.83</b>

19           Although this is a narrow range of COSS class ROR results, it should be  
20          noted that an allocation approach, such as the assignment of Account 369 service  
21          costs to the Residential and Non-Residential customer classes, is a very  
22          longstanding approach used in the COSS, and that the reassignment of service  
23          costs to the Residential customer classes would increase the cost burden on this

1 class. The Company concurs however with Staff that service costs should be  
2 shifted, and believes that an appropriate reassignment using the current COSS  
3 would fall within a narrow range of the class ROR values shown above.

4 My Schedule EPT R-2 shows the effect on the customer-related cost  
5 component resulting from the revised allocations. This schedule also reflects the  
6 impact of the post-filing corrections on the customer component costs. The  
7 Company, however, does not agree with Staff's recommended use of only  
8 customer counts to allocate service costs.

9 **6. Q: Please discuss the method used in your COSS to allocate service drops.**

10 A: I used the undiversified customer maximum demand allocator (i.e.,  
11 Customer NCP) as applied in the prior case to assign the installed cost of service  
12 conductors (service drop). The Company's investment in service drops is  
13 dependent upon many factors including the use of overhead versus underground  
14 facilities, the size of load, location, and customer specific requirements. Each of  
15 these factors would impact the specific service requirements and the weighting by  
16 class. The customer maximum demand has been used as a proxy for allocating the  
17 cost of service drops, and also recognizes that larger loads generally require more  
18 costly service drops. Staff's recommended use of only customer counts as an  
19 allocator does not reflect any of these cost considerations, and assumes no cost  
20 differences, which is incorrect for a cost assignment approach.

21 **7. Q: Have you prepared updated schedules that incorporate the Company's**  
22 **proposed changes to the COSS?**

1       A:       Yes. My Schedule EPT R-3 provides a summary of the rate base,  
2           revenues, and operating expenses assigned to each customer class, and Schedule  
3           EPT R-4 details the customer-related and demand-related component costs,  
4           incorporating the proposed changes. The effect of these proposed changes on the  
5           class rates of return are highlighted for residential classes below:

		Rate of Return (%)	
	<u>Customer Class</u>	<u>Filed COSS</u>	<u>Revised COSS</u>
8	<b>Residential</b>	<b>6.34</b>	<b>6.00</b>
9	<b>Residential Non-Heating</b>	<b>6.58</b>	<b>6.28</b>
10	<b>Residential Heating</b>	<b>5.85</b>	<b>5.42</b>

11      8. Q: What is the effect on the filed COSS from updating only the requested  
12           overall rate of return used in the cost study?

13       A:       Staff Witness Solganick emphasizes in Direct Testimony on pages 7, 8  
14           and 10, that the use of the preliminary ROR values has inflated the COSS results.  
15           My Schedule EPT R-5, however, shows that the actual impact of updating the  
16           ROR does not change the class rates of return, as highlighted for the Residential  
17           classes below. This is an expected result because the "Claimed Revenue"  
18           allocator has only limited application as a line-item allocator in the COSS.

		Rate of Return (%)	
	<u>Customer Class</u>	<u>Filed COSS</u>	<u>Revised COSS</u>
21	<b>Residential</b>	<b>6.34</b>	<b>6.34</b>
22	<b>Residential Non-Heating</b>	<b>6.58</b>	<b>6.58</b>
23	<b>Residential Heating</b>	<b>5.85</b>	<b>5.85</b>

1           Similarly, my Schedule EPT R-6 shows the minor impact of the ROR update on  
2           the customer cost component by class.

3           **9. Q: Staff Witness Solganick discusses the load data used in the COSS on pages 8**  
4           **and 12 of his direct testimony. Please comment.**

5           A:         As outlined in my Direct Testimony on pages 8 and 9, the Company  
6           recommends use of the Lodestar Profiling and Settlement System (LPSS)  
7           database to calculate the demand factors used in the COSS. The LPSS is a system  
8           of proprietary products licensed from ORACLE by Pepco Holdings Inc. for  
9           conducting Retail Settlement in all three PJM zones served by the PHI operating  
10          companies. The LPSS database contains the hourly loads for each customer class  
11          from May, 2006 through the present that are used to perform the hourly load  
12          settlement that is reconciled to the actual metered zonal loads. The system  
13          contains all monthly energy and demand readings for every active monthly-  
14          metered service and all interval data for all interval metered services over this  
15          period for all jurisdictions served by Atlantic City Electric, Delmarva Power and  
16          Pepco Power Delivery Companies.

17          **10. Q: Please briefly describe the demand measures used in the COSS and how the**  
18          **LPSS database has been used to calculate these measures.**

19          A:         The two basic demand measures used in the COSS are the Customer  
20          Maximum Diversified Demands (Class MDD) and the Customer Non-coincident  
21          Peak Demands (Customer NCP). The Class MDD is the maximum hourly demand  
22          for the customer class over the analysis period where the simultaneous demands  
23          of the class of customers are taken as a whole. The Class MDD is used to allocate

1 system assets where the load diversity is usually high, such as primary facilities.  
2 The Customer NCP is the sum of the individual maximum demands of the  
3 customers within a class on a customer-by-customer basis over the analysis  
4 period. The Customer NCP is a measure of undiversified demand and is used to  
5 allocate facilities located nearer the customer.<sup>1</sup>

6 **11. Q: How has the LPSS data base been used to calculate the Class MDD**  
7 **measures?**

8 A: The Class Maximum Diversified Demands (Class MDD) are obtained  
9 through a query of the hourly class load data contained in the LPSS. Specifically,  
10 a SAS (Statistical Analysis System) program has been developed by our Load  
11 Research and Settlements group for COSS purposes to aggregate the hourly loads  
12 for each customer class. The SAS program then finds each COSS class maximum  
13 hourly load and the corresponding date and time to determine the demand factors.

14 **12. Q: How has the LPSS database been used to calculate the Customer NCP**  
15 **demand measures?**

16 A: For each customer with a metered demand, the program determined the  
17 customer's maximum demand for the year. Also, the program calculated the class  
18 average annual load factor for the demand metered group. The class average load  
19 factor was applied to the annual consumption for each non-demand metered  
20 service in the corresponding group to calculate the NCP for each service.  
21 Summing the demand metered group and non-demand metered group NCP's by

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<sup>1</sup> Staff Witness Solganick highlights in his direct testimony on page 11, lines 15-20, an inaccuracy in my testimony regarding the use of this demand allocator. The Company issued an Errata Notice regarding this point prior to the filing of Staff's direct testimony.

1 class produced the sum of the individual customer NCP totals for all classes  
2 except the unmetered lighting class and the non-demand metered residential class.

3 **13. Q: Please describe how the LPSS database has been used to calculate the**  
4 **Customer NCP for the Residential Classes.**

5 A: The Delaware specific load survey data required to estimate the  
6 Residential Class NCP are currently being processed. Specifically, the Company  
7 has installed the metering infrastructure needed to conduct the customer load  
8 studies, and over the last several months initial data have been received and are  
9 being processed. There is however 2008 load survey data available for the  
10 Residential classes in the PEPCO service territory. As explained in my Direct  
11 Testimony on page 9, this data has been used to compute average load factors for  
12 the residential heating and non-heating customer groups that have been applied to  
13 each Delaware Residential customer's kWh sales to determine the Customer's  
14 NCP. The average kWh per customer statistics (2008) for the two jurisdictions  
15 used in the demand analysis are the following:

	<u>Average kWh sales per Customer</u>	
	<u>PEPCO-MD</u> <sup>2</sup>	<u>DPL-DE</u>
18	Residential Non-Heating	10,260
19	Residential Heating	13,961

20 The PEPCO load factor data have been applied in this case pending the  
21 availability of the Delaware specific load research data. Ultimately, the Blueprint

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<sup>2</sup> The PEPCO Maryland average sales figures exclude the Residential Time Metered sales because this class has a very different customer load profile than the typical residential customers.

1 for the Future and AMI initiatives in Delaware will provide extensive statistics on  
2 customer load.

3 **14. Q: In Maryland Case No. 9192, did the MD Commission Staff agree that the**  
4 **Company's proposed use of the LPSS database to calculate the demand**  
5 **allocators was reasonable?**

6 A: Yes. In Maryland Case No. 9192, the Company proposed the same method  
7 of using the LPSS data base, together with the PEPCO load factor data, to  
8 calculate the demand measures. In that case, the Maryland Staff considered the  
9 Company's proposed approach an appropriate method because the existing  
10 approach used historical data that were over ten years old and more recent  
11 customer load research data would be forthcoming.

12 In this case, Staff has challenged the use of the PEPCO load factor data in  
13 the demand analyses. Staff, however, has not provided any quantified alternative  
14 for consideration.

15 **15. Q: Please comment on Staff Witness Solganick's proposal for a technical**  
16 **conference on COSS issues, as described in his direct testimony on page 15,**  
17 **lines 4-6.**

18 A: The Company would encourage a technical conference among the Staff  
19 and the parties with a focused agenda to discuss cost of service issues.

20 **16. Q: Does this conclude your testimony?**

21 A: Yes.

Schedule EPT R-1

**Delmarva Power & Light - Delaware Electric Distribution**  
**Class Cost of Service Study for the 12 months ending 3/09**  
**Revised ROR Results**  
**Reflecting selected Staff recommendations**  
**and COSS post-filing revisions**

<u>Customer Class</u>	<u>Rate of Return (%)</u>	
	<u>Filed COSS</u>	<u>Revised COSS</u>
1 <b>Residential</b>	6.34	5.98
2 <b>Residential Non Heating</b>	6.58	6.04
3 <b>Residential Space Heating</b>	5.85	5.83
4 <b>General Service Secondary Small</b>	12.74	14.30
5 <b>Telecommunication Network Service</b>	24.57	30.69
6 <b>General Service Secondary Large</b>	8.63	9.34
7 <b>General Service Primary</b>	6.41	6.54
8 <b>General Service Transmission</b>	43.15	43.30
9 <b>Street Lighting Service</b>	6.84	7.27

Schedule EPT R-2

**Delmarva Power & Light - Delaware Electric Distribution**  
**Class Cost of Service Study for the 12 months ending 3/09**  
**Revised Customer Component Costs**  
**Reflecting selected Staff recommendations**  
**and COSS post-filing revisions**

<b>Customer Class</b>	<b>Customer Costs- \$/Month/Customer</b>	
	<b>Filed COSS</b>	<b>Revised COSS</b>
1 <b>Residential</b>	15.91	16.56
2 <b>Residential Non Heating</b>	15.53	16.41
3 <b>Residential Space Heating</b>	16.90	16.96
4 <b>General Service Secondary Small</b>	24.25	21.23
5 <b>Telecommunication Network Service</b>	15.13	12.83
6 <b>General Service Secondary Large</b>	205.07	168.34
7 <b>General Service Primary</b>	628.48	648.35
8 <b>General Service Transmission</b>	7,730.32	7,702.52
9 <b>Street Lighting Service</b>	NA	NA

17-Mar-10 16:28

**DELMARVA POWER & LIGHT COMPANY**  
**DELAWARE RETAIL COST OF SERVICE STUDY**  
**12 MONTHS ENDED MARCH 31, 2009**  
**ELECTRIC DISTRIBUTION REVISED**

Schedule EPT R-3

<b>SUMMARY OF RESULTS:1</b>		<b>ALLOC</b>	<b>TOTAL DELAWARE DISTRIBUTION (1)</b>	<b>RESIDENTIAL SERVICE (2)</b>	<b>TOTAL GENERAL SERV SECONDARY (3)</b>	<b>TOTAL GENERAL SERV PRIMARY (4)</b>	<b>STREET LIGHTING SERVICE (6)</b>
<b>RATE BASE</b>							
1 Total System Electric Distribution	686,963,487		528,123,932	176,286,400	109,512,164	1,703,743	71,357,248
2 Less: Depreciation Reserve	369,149,760		220,733,160	73,104,109	45,691,934	730,122	28,890,435
3 Total Net Profit	517,813,727		307,390,772	103,182,291	63,820,230	973,620	42,466,813
<b>ADD:</b>							
4 CWP	23,102,453		14,172,603	4,474,003	2,903,424	53,759	1,498,665
5 Working Capital	4,940,604		3,107,088	1,072,780	594,415	61,985	104,335
6 Materials & Supplies	9,943,265		5,911,356	1,978,749	1,226,549	18,896	807,714
7 Miscellaneous Rate Base Items	15,390,986		10,112,514	2,791,546	2,016,389	50,903	419,845
<b>DEDUCT:</b>							
8 Accumulated FIT	3,058,358		1,829,782	605,366	378,679	6,072	238,459
9 Customer Advances	958,423		588,342	200,531	122,571	1,768	86,212
10 Customer Deposits	10,227,884		6,764,957	1,689,247	1,032,512	14,898	726,232
11 Deferred FIT	(110,125,589)		(65,389,051)	(21,953,010)	(13,636,851)	(211,187)	(8,935,490)
12 Deferred SIT	(29,586,387)		(17,580,700)	(5,890,146)	(3,657,208)	(55,637)	(2,395,696)
13 TOTAL RATE BASE	417,218,454		248,541,503	83,161,079	51,733,186	868,602	32,915,084
<b>DEVELOPMENT OF RETURN</b>							
14 Revenue - Retail Sales	147,849,385		86,761,047	35,174,922	17,505,136	1,308,409	7,038,870
15 Interdepartmental	19,452		12,337	3,602	2,421	115	977
16 Other Operating Revenue	3,159,214		2,004,510	618,106	290,333	124,331	201,934
17 Total Electric Operating Revenue	151,058,050		88,777,894	35,696,630	17,797,850	1,432,855	7,302,782
<b>LESS:</b>							
18 Operating & Maintenance Expense	77,842,257		52,000,123	13,539,919	9,712,228	759,087	1,830,889
19 Depreciation & Amortization Expense	22,905,386		13,705,269	4,533,505	2,836,241	45,506	1,784,865
20 Other Taxes	6,812,948		4,136,990	1,330,980	850,445	15,370	479,163
21 Net FIT Adjustment	(388,911)		(203,493)	(56,615)	(42,016)	(638)	(25,370)
22 Interest on Customer Deposits	388,638		223,984	55,930	34,186	493	24,045
23 Income Taxes	111,836,408		4,221,226	5,467,551	1,058,039	237,811	841,771
24 Total Operating Expenses	119,397,446		74,084,093	24,861,280	14,459,124	1,057,569	4,935,373
25 PLUS: AFUDC	360,177		217,922	70,607	44,884	770	25,984
26 OPERATING INCOME	31,970,782		14,911,717	10,905,957	3,388,660	376,055	2,393,393
27 RATE OF RETURN RECD	7.66%		6.34%	11.85%	6.41%	43.15%	6.84%
28 RATE OF RETURN	7.66%		6.00%	13.11%	6.54%	43.29%	7.27%
28 RELATIVE RATE OF RETURN	1.00		0.78	1.71	0.85	5.65	0.95

17-Mar-10

**DELMARVA POWER & LIGHT COMPANY  
DELAWARE RETAIL COST OF SERVICE STUDY  
12 MONTHS ENDED MARCH 31, 2009**

**ELECTRIC DISTRIBUTION REVISED**

	Rate 126.7 RESIDENTIAL (7)-2	Rate 6.8 RESIDENTIAL (6)	Rate 6.8 SPACE HEATING (9)	Rate 10.11-12-13-14 GENERAL SERV SECONDARY Sm (10)	COMMUNICATION NETWORK SERVICE (19)	GENERAL SERV SECONDARY LARGE (11)	GENERAL SERV PRIMARY (12)	Rate 17-18-28 GENERAL SERV (13)	Rate 20-40 GENERAL SERV TRANSMISSION (14)	Rate 21-25-30 STREET LIGHTING SERVICE (14)
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**SUMMARY OF RESULTS-1**

**RATE BASE**

1 Total System Electric Distribution  
2 Less: Depreciation Reserve  
3 Total Net Plant

**ADT:**

4 CWP  
5 Working Capital  
6 Materials & Supplies  
7 Miscellaneous Rate Base Items  
**DEDUCT:**  
8 Accumulated ITC  
9 Customer Advances  
10 Customer Deposits  
11 Deferred FIT  
12 Deferred SIT  
13 **TOTAL RATE BASE**

**DEVELOPMENT OF RETURN**

14 Revenue - Retail Sales  
15 Interdepartmental  
16 Other Operating Revenue  
17 Total Electric Operating Revenue

**LESS:**

18 Operating & Maintenance Expense  
19 Depreciation & Amortization Expenses  
20 Other Taxes  
21 Net ITC Adjustment  
22 Interest on Customer Deposits  
23 Income Taxes  
24 Total Operating Expenses  
25 PLUS: AFUDC  
26 OPERATING INCOME  
RATE OF RETURN FILED  
27 RATE OF RETURN  
28 RELATIVE RATE OF RETURN

17,110,505  
71,400,576  
100,399,929  
56,007,626  
78,765,587  
134,774,213  
302,189  
350,691  
28,992  
16,386  
7,177  
38,173  
463,924  
152,460  
1,284,291  
(16,770,514)  
(4,500,522)  
63,724,810  
662,880  
16,794,294  
24,055,014  
40,849,307  
45,691,934  
63,820,230  
971,872  
165,250  
459,321  
499,373  
2,533  
558  
4,697  
(5,101,310)  
(1,367,843)  
340,664  
109,512,164  
730,122  
573,620  
53,759  
594,415  
1,226,549  
2,016,389  
138,910  
47,514  
400,249  
51,657,206  
19,085,605  
397,110  
32  
1,287  
398,429  
6,102,827  
739  
110,810  
6,214,376  
17,505,136  
2,421  
290,333  
17,797,890  
1,306,409  
115  
124,331  
1,432,855  
7,099,870  
977  
201,934  
7,302,782

1,751,604  
8,63%  
9,17%  
1,20  
44,894  
770  
25,984

3,383,660  
6,41%  
6,54%  
0,85  
376,055  
43,15%  
43,29%  
5,65  
2,393,393  
6,84%  
7,27%  
0,95

## Schedule EPT R-4

**DELMARVA POWER & LIGHT COMPANY  
DELAWARE RETAIL COST OF SERVICE STUDY  
12 MONTHS ENDED MARCH 31, 2009  
ELECTRIC DISTRIBUTION REVISED**

	<b>TOTAL DELWARE DISTRIBUTION (1)</b>	<b>TOTAL RESIDENTIAL SERVICE (2)</b>	<b>TOTAL GENERAL SERV SECONDARY (3)</b>	<b>TOTAL GENERAL SERV PRIMARY (4)</b>	<b>TOTAL GENERAL SERV TRANSMISSION (5)</b>	<b>STREET LIGHTING SERVICE (6)</b>						
<b>REVENUES REQUIRED</b>												
<b>1 DEMAND DISTRIBUTION</b>												
2 DEMAND DISTRIBUTION PRIMARY	79,301,338	38,886,594	25,581,781	13,939,136	255,966	637,861						
3 DEMAND DISTRIBUTION SECONDARY	56,471,134	24,715,131	17,104,664	13,939,136	255,966	456,236						
4 DEMAND DISTRIBUTION TRANSFORMERS	8,401,436	5,818,044	2,510,864	0	0	72,528						
5 CUSTOMER COMPONENTS	14,428,768	8,353,418	5,966,253	0	0	109,097						
6 CUSTOMER METERS COMPONENT	71,706,712	49,891,301	10,114,849	3,858,753	1,176,898	6,664,920						
7 CUSTOMER SERVICES COMPONENT	12,442,430	6,494,602	3,596,381	1,883,339	480,064	8,045						
8 ACCT 902 - METER READING COMP	5,974,047	5,602,201	371,846	0	0	0						
9 ACCT 903 - CUST RECORDS & COLL COMP	14,020,768	11,902,580	1,907,319	200,772	8,753	1,365						
10 CUSTOMER SERVICES EXP COMP	23,822,483	20,779,228	2,782,865	85,785	2,766	171,820						
11 CUSTOMER SALES EXP COMP	781,528	461,511	131,804	128,096	51,809	8,308						
12 CUSTOMER OTHER COMPONENT	1,011,435	566,839	178,169	158,842	97,203	10,382						
13 TOTAL DELAWARE DISTRIBUTION	13,654,020	4,086,341	1,146,465	1,401,919	556,295	6,465,000						
14 END OF YEAR CUSTOMERS	151,008,950	88,777,894	35,636,630	17,797,890	1,432,856	7,302,782						
15 CUSTOMER \$/MONTH/CUSTOMER	302,970 \$19.72	265,183 \$15.68	32,300 \$26.10	512 \$627.54	9 \$10,897.12	4,965 \$111.87						

DELMARVA POWER & LIGHT COMPANY  
DELAWARE RETAIL COST OF SERVICE STUDY  
12 MONTHS ENDED MARCH 31, 2009  
ELECTRIC DISTRIBUTION REVISED

Schedule EPT R-4

	Rate 1,2,6,7 RESIDENTIAL (7)-2	Rate 8,9 RESIDENTIAL SPACE HEATING (8)	Rate 10,11,12,13,14 GENERAL SERV SECONDARY Sm (9)	Rate 11 COMMUNICATION NETWORK SERVICE (10)	Rate 12 GENERAL SERV SECONDARY LARGE (11)	Rate 13 GENERAL SERV PRIMARY (12)	Rate 14 GENERAL SERV TRANSMISSION (13)	Rate 15 STREET LIGHTING SERVICE (14)	Rate 16 TELE-	Rate 17,18,26 GENERAL SERV PRIMARY (12)	Rate 18,20,40 GENERAL SERV TRANSMISSION (13)	Rate 21,25,30 STREET LIGHTING SERVICE (14)
<b>PRESENT RATE OF RETURN SUMMARY SCHEDULE</b>												
1. COMPONENT FORMAT												
RATE OF RETURN	6.28%	5.42%										
REVENUES REQUIRED												
1 DEMAND DISTRIBUTION	27,114,109	11,772,485	20,160,545	96,594	5,325,642	13,939,136	25,966	637,861				
2 DEMAND DISTRIBUTION PRIMARY	17,608,876	7,105,255	13,076,897	63,782	3,963,986	13,939,136	25,966	456,236				
3 DEMAND DISTRIBUTION SECONDARY	3,872,891	1,945,153	2,500,878	9,986	0	0	0	72,528				
4 DEMAND DISTRIBUTION TRANSFORMERS	5,631,341	2,722,077	4,582,771	21,826	1,361,657	0	0	109,977				
5 CUSTOMER COMPONENTS	35,579,857	14,311,444	8,923,280	302,835	888,734	3,858,753	1,176,889	6,664,920				
6 CUSTOMER METERS COMPONENT	4,737,012	1,757,589	3,293,612	78,027	224,742	1,863,339	460,064	8,045				
7 CUSTOMER SERVICES COMPONENT	3,550,184	2,052,017	306,427	1,066	64,352	0	0	0				
8 ACCT 902 - METER READING COMP	8,681,759	3,220,621	1,673,105	91,479	142,735	200,772	8,753	1,365				
9 ACCT 903 - CUST RECORDS & COLL COMP	15,099,839	5,679,389	2,590,639	123,736	68,491	85,785	2,766	171,820				
10 CUSTOMER SERVICES EXP COMP	324,591	136,919	99,717	2,181	29,906	128,096	51,809	8,308				
11 CUSTOMER SALES EXP COMP	400,081	166,758	136,172	3,683	38,315	158,842	97,203	10,382				
12 CUSTOMER OTHER COMPONENT	2,786,390	1,297,951	823,608	2,663	320,194	1,401,919	556,295	6,465,000				
13 TOTAL DELAWARE DISTRIBUTION	62,693,966	26,083,929	28,083,825	398,429	6,214,376	17,797,890	1,432,855	7,302,782				
14 END OF YEAR CUSTOMERS	192,823	72,360	30,471	1,428	402	512	9	4,965				
15 CUSTOMER \$/MONTH/CUSTOMER	\$15.38	\$16.48	\$24.40	\$17.67	\$184.42	\$627.54	\$10,897.12	\$111.87				

DELMARVA POWER & LIGHT COMPANY  
DELAWARE RETAIL COST OF SERVICE STUDY  
12 MONTHS ENDED MARCH 31, 2009  
ELECTRIC DISTRIBUTION REVISED

Schedule EPT R-4

TOTAL DELAWARE DISTRIBUTION (1)	TOTAL RESIDENTIAL SERVICE (2)	TOTAL GENERAL SERV SECONDARY (3)	TOTAL GENERAL SERV PRIMARY (4)	TOTAL GENERAL SERV TRANSMISSION (5)	STREET LIGHTING SERVICE (6)
PRESENT RATE OF RETURN SUMMARY SCHEDULE - FUNCTION FORMAT RATE OF RETURN	7.66%	6.00%	13.11%	6.54%	43.29% 7.27%
\$/KWH					
1 DEMAND DISTRIBUTION	\$0.0091	\$0.0131	\$0.0054	\$0.0032	\$0.0122
2 DEMAND DISTRIBUTION PRIMARY	\$0.0065	\$0.0083	\$0.0054	\$0.0032	\$0.0087
3 DEMAND DISTRIBUTION SECONDARY	\$0.0010	\$0.0020	\$0.0013	\$0.0000	\$0.0014
4 DEMAND DISTRIBUTION TRANSFORMERS	\$0.0017	\$0.0028	\$0.0031	\$0.0000	\$0.0021
5 CUSTOMER COMPONENTS	\$0.0082	\$0.0169	\$0.0052	\$0.0015	\$0.1278
6 CUSTOMER METERS COMPONENT	\$0.0014	\$0.0022	\$0.0019	\$0.0007	\$0.0002
7 CUSTOMER SERVICES COMPONENT	\$0.0007	\$0.0019	\$0.0032	\$0.0000	\$0.0000
8 ACCT 902 - METER READING COMP	\$0.0016	\$0.0040	\$0.0010	\$0.0001	\$0.0000
9 ACCT 903 - CUST RECORDS & COLL COMP	\$0.0027	\$0.0070	\$0.0014	\$0.0000	\$0.0033
10 CUSTOMER SERVICES EXP COMP	\$0.0001	\$0.0002	\$0.0001	\$0.0000	\$0.0002
11 CUSTOMER SALES EXP COMP	\$0.0001	\$0.0002	\$0.0001	\$0.0001	\$0.0002
12 CUSTOMER OTHER COMPONENT	\$0.0016	\$0.0014	\$0.0006	\$0.0005	\$0.1239
13 TOTAL DELAWARE DISTRIBUTION	\$0.0174	\$0.0300	\$0.0185	\$0.0089	\$0.1400
14 CUSTOMER COMPONENT \$/MO/CUST	\$19.72	\$15.68	\$26.10	\$627.54	\$111.87

## Schedule EPT R-4

DELMARVA POWER &amp; LIGHT COMPANY

DELAWARE RETAIL COST OF SERVICE STUDY

12 MONTHS ENDED MARCH 31, 2009

ELECTRIC DISTRIBUTION REVISED

	Rate 1,26.7 RESIDENTIAL (7)-2	Rate 8.9 RESIDENTIAL SPACE HEATING (8)	Rate Code 10,11,12,13,14 GENERAL SERV SECONDARY \$m (9)	TELE- COMMUNICATION NETWORK SERVICE (10)	Rate 16 GENERAL SERV SECONDARY LARGE (11)	Rate 17,18,26 GENERAL SERV PRIMARY (12)	Rate 20,40 GENERAL SERV TRANSMISSION (13)	Rate 21,25,30 STREET LIGHTING SERVICE (14)
<b>PRESENT RATE OF RETURN SUMMARY SCHEDULE</b>								
• FUNCTION FORMAT								
RATE OF RETURN	6.28%	5.42%	14.19%		33.24%	9.17%	6.54%	43.29%
SRVWH								
1 DEMAND DISTRIBUTION	\$0.0142	\$0.0112	\$0.0154	\$0.0087	\$0.0054	\$0.0002	\$0.0122	
2 DEMAND DISTRIBUTION PRIMARY	\$0.0092	\$0.0068	\$0.0100	\$0.0064	\$0.0054	\$0.0002	\$0.0087	
3 DEMAND DISTRIBUTION SECONDARY	\$0.0020	\$0.0019	\$0.0019	\$0.0014	\$0.0000	\$0.0000	\$0.0014	
4 DEMAND DISTRIBUTION TRANSFORMERS	\$0.0029	\$0.0026	\$0.0035	\$0.0022	\$0.0000	\$0.0000	\$0.0021	
5 CUSTOMER COMPONENTS	\$0.0186	\$0.0137	\$0.0068	\$0.0143	\$0.0015	\$0.0010	\$0.1278	
6 CUSTOMER METERS COMPONENT	\$0.0025	\$0.0017	\$0.0025	\$0.0014	\$0.0007	\$0.0004	\$0.0032	
7 CUSTOMER SERVICES COMPONENT	\$0.0019	\$0.0020	\$0.0025	\$0.0013	\$0.0002	\$0.0000	\$0.0000	
8 ACCT 902 - METER READING COMP	\$0.0045	\$0.0031	\$0.0045	\$0.0132	\$0.0002	\$0.0001	\$0.0000	
9 ACCT 903 - CUST RECORDS & COLL COMP	\$0.0079	\$0.0054	\$0.0079	\$0.0020	\$0.0001	\$0.0000	\$0.0033	
10 CUSTOMER SERVICES EXP COMP	\$0.0002	\$0.0001	\$0.0001	\$0.0000	\$0.0000	\$0.0000	\$0.0002	
11 CUSTOMER SALES EXP COMP	\$0.0002	\$0.0012	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0002	
12 CUSTOMER OTHER COMPONENT	\$0.0015	\$0.0006	\$0.0004	\$0.0005	\$0.0005	\$0.0005	\$0.1239	
13 TOTAL DELAWARE DISTRIBUTION	\$0.0328	\$0.0249	\$0.0223	\$0.0575	\$0.0101	\$0.0069	\$0.0012	\$0.1400
14 CUSTOMER COMPONENT \$MO/CUST	\$15.38	\$16.48	\$24.40	\$17.67	\$184.42	\$627.54	\$10,897.12	\$111.87

DELMARVA POWER & LIGHT COMPANY  
DELAWARE RETAIL COST OF SERVICE STUDY  
12 MONTHS ENDED MARCH 31, 2009  
ELECTRIC DISTRIBUTION REVISED

Schedule EPT R-4

	TOTAL DELAWARE DISTRIBUTION (1)	TOTAL RESIDENTIAL SERVICE (2)	TOTAL GENERAL SERV SECONDARY (3)	TOTAL GENERAL SERV PRIMARY (4)	TOTAL GENERAL SERV TRANSMISSION (5)	TOTAL STREET LIGHTING SERVICE (6)
CLAIMED RATE OF RETURN SUMMARY SCHEDULE - COMPONENT FORMAT RATE OF RETURN	7.97%		7.97%	7.97%	7.97%	7.97%
REVENUES REQUIRED						
1 DEMAND DISTRIBUTION	79,843,655	44,580,339	19,441,755	15,078,192	75,250	688,119
2 DEMAND DISTRIBUTION PRIMARY	56,655,386	27,814,652	13,412,133	15,078,192	75,250	475,759
3 DEMAND DISTRIBUTION SECONDARY	8,475,096	6,522,851	1,876,775	0	(0)	75,470
4 DEMAND DISTRIBUTION TRANSFORMERS	14,512,573	10,242,836	4,152,847	0	(0)	116,889
5 CUSTOMER COMPONENTS	73,350,350	52,588,322	8,924,763	3,986,740	831,876	7,028,549
6 CUSTOMER METERS COMPONENT	12,116,092	7,074,285	2,861,166	1,995,636	176,788	8,297
7 CUSTOMER SERVICES COMPONENT	7,137,916	6,883,896	254,020	0	(0)	0
8 ACCT 902 - METER READING COMP	14,246,552	12,324,433	1,709,582	205,848	5,397	1,382
9 ACCT 903 - CUST RECORDS & COLL COMP	23,947,861	21,013,706	2,672,751	86,604	2,305	172,494
10 CUSTOMER SERVICES EXP COMP	779,816	463,057	130,359	128,648	49,435	8,317
11 CUSTOMER SALES EXP COMP	983,843	584,616	164,354	162,404	61,972	10,497
12 CUSTOMER OTHER COMPONENT	14,148,269	4,244,408	1,132,531	1,407,599	536,069	6,827,662
13 TOTAL DELAWARE DISTRIBUTION	153,204,005	97,168,661	28,366,518	19,064,933	907,125	7,695,768
14 END OF YEAR CUSTOMERS	302,970	265,183	32,300	512	9	4,965
15 CUSTOMER \$/MONTH/CUSTOMER	\$20.18	\$16.53	\$23.03	\$648.36	\$7,702.55	\$117.97

## Schedule EPT R-4

DELMARVA POWER & LIGHT COMPANY  
 DELAWARE RETAIL COST OF SERVICE STUDY  
 12 MONTHS ENDED MARCH 31, 2009  
 ELECTRIC DISTRIBUTION REVISED

	Rate 1.2,6.7 RESIDENTIAL (7)-2	Rate 8.9 RESIDENTIAL SPACE HEATING (8)	Rate Code 10,11,12,13,14 GENERAL SERV SECONDARY Sm (9)	Rate Code TELE- COMMUNICATION NETWORK SERVICE (10)	Rate 16 GENERAL SERV SECONDARY LARGE (11)	Rate 17,18,26 GENERAL SERV PRIMARY (12)	Rate 20,40 GENERAL SERV TRANSMISSION (13)	Rate 21,25,30 STREET LIGHTING SERVICE (14)
<b>CLAIMED RATE OF RETURN SUMMARY SCHEDULE</b>								
- COMPONENT FORMAT								
RATE OF RETURN	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%
REVENUES REQUIRED								
1 DEMAND DISTRIBUTION	30,452,638	14,127,701	14,452,171	35,823	4,953,761	15,078,192	75,250	668,119
2 DEMAND DISTRIBUTION PRIMARY	19,502,737	8,311,914	9,665,258	25,436	3,721,438	15,078,192	75,250	475,759
3 DEMAND DISTRIBUTION SECONDARY	4,266,375	2,256,477	1,872,667	4,108	0	0	0	75,470
4 DEMAND DISTRIBUTION TRANSFORMERS	6,683,526	3,559,310	2,914,246	6,279	1,232,323	0	0	116,889
5 CUSTOMER COMPONENTS	37,118,470	15,469,851	7,842,585	215,112	867,056	3,986,740	831,876	7,028,649
6 CUSTOMER METERS COMPONENT	5,104,393	1,969,813	2,609,893	36,956	1,985,636	176,788	176,788	8,297
7 CUSTOMER SERVICES COMPONENT	4,207,268	2,676,629	195,428	308	58,283	0	0	0
8 ACCT 902 - METER READING COMP	8,951,121	3,373,313	1,507,027	62,752	139,803	205,848	5,307	1,382
9 ACCT 903 - CUST RECORDS & COLL COMP	15,248,753	5,764,953	2,496,974	107,808	67,968	86,604	2,305	172,494
10 CUSTOMER SERVICES EXP COMP	325,518	137,539	98,456	2,091	29,812	128,648	49,435	8,317
11 CUSTOMER SALES EXP COMP	410,951	173,664	124,112	2,627	37,615	162,404	61,972	10,497
12 CUSTOMER OTHER COMPONENT	2,870,467	1,373,941	810,696	2,571	319,265	1,407,599	536,069	6,827,662
13 TOTAL DELAWARE DISTRIBUTION	67,571,109	29,597,552	22,284,756	260,935	5,820,826	19,064,933	907,125	7,696,768
14 END OF YEAR CUSTOMERS	192,823	72,360	30,471	1,428	402	512	9	4,965
15 CUSTOMER \$/MONTH/CUSTOMER		\$16.04	\$21.45	\$12.55	\$179.93	\$648.36	\$7,702.55	\$117.97

DELMARVA POWER & LIGHT COMPANY  
 DELAWARE RETAIL COST OF SERVICE STUDY  
 12 MONTHS ENDED MARCH 31, 2009  
 ELECTRIC DISTRIBUTION REVISED

Schedule EPT R-4

TOTAL DELAWARE DISTRIBUTION (1)	RESIDENTIAL SERVICE (2)	TOTAL GENERAL SERV SECONDARY (3)	TOTAL GENERAL SERV PRIMARY (4)	TOTAL GENERAL SERV TRANSMISSION (5)	STREET LIGHTING SERVICE (6)					
<b>CLAIMED RATE OF RETURN SUMMARY SCHEDULE</b>										
- FUNCTION FORMAT										
RATE OF RETURN										
Ave Number of Customers (12 Months)	302,970	265,183	32,300	512	9					
\$/kWh					4,965					
1 DEMAND DISTRIBUTION	0.0092	0.0151	0.0101	0.0058	0.0128					
2 DEMAND DISTRIBUTION PRIMARY	0.0065	0.0054	0.0070	0.0058	0.0051					
3 DEMAND DISTRIBUTION SECONDARY	0.0010	0.0022	0.0010	0.0000	(0.0000)					
4 DEMAND DISTRIBUTION TRANSFORMERS	0.0017	0.0035	0.0022	0.0000	(0.0000)					
5 CUSTOMER COMPONENTS	0.0084	0.0178	0.0046	0.0015	0.0022					
6 CUSTOMER METERS COMPONENT	0.0014	0.0024	0.0015	0.0008	0.1348					
7 CUSTOMER SERVICES COMPONENT	0.0008	0.0023	0.0001	0.0000	0.0002					
8 ACCT 902 - METER READING CCMP	0.0016	0.0042	0.0009	0.0001	0.0000					
9 ACCT 903 - CUST RECORDS & COLL. COMP	0.0028	0.0071	0.0014	0.0000	0.0033					
10 CUSTOMER SERVICES EXP COMP	0.0001	0.0002	0.0001	0.0000	0.0002					
11 CUSTOMER SALES EXP COMP	0.0001	0.0002	0.0001	0.0001	0.0002					
12 CUSTOMER OTHER COMPONENT	0.0016	0.0014	0.0006	0.0005	0.1309					
13 TOTAL DELAWARE DISTRIBUTION	0.0176	0.0328	0.0147	0.0074	0.0008					
14 CUSTOMER COMPONENT \$/MO/CUST	\$20.18	\$16.53	\$23.03	\$648.36	\$7,702.55					
					\$117.97					

## Schedule EPT R-4

DELMARVA POWER & LIGHT COMPANY  
DELAWARE RETAIL COST OF SERVICE STUDY  
12 MONTHS ENDED MARCH 31, 2009

## ELECTRIC DISTRIBUTION REVISED

	Rate 1,26.7 RESIDENTIAL (7.2)	Rate 8.9 RESIDENTIAL SPACE HEATING (8)	Rate Code 10,11,12,13,14 GENERAL SERV SECONDARY Sm (9)	TELE- COMMUNICATION NETWORK SERVICE (10)	Rate 16 GENERAL SERV SECONDARY LARGE (11)	Rate 17,18,26 GENERAL SERV PRIMARY (12)	Rate 20,40 GENERAL SERV TRANSMISSION (13)	Rate 21,25,30 STREET LIGHTING SERVICE (14)
<b>CLAIMED RATE OF RETURN SUMMARY SCHEDULE</b>								
- FUNCTION FORMAT	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%
RATE OF RETURN								
Ave Number of Customers (12 Months)	192,823	72,360	30,471	1,428	402	512	9	4,965
\$/kWh								
1 DEMAND DISTRIBUTION	0.0159	0.0135	0.0111	0.0052	0.0081	0.0058	0.0001	0.0128
2 DEMAND DISTRIBUTION PRIMARY	0.0102	0.0079	0.0074	0.0037	0.0061	0.0058	0.0001	0.0091
3 DEMAND DISTRIBUTION SECONDARY	0.0022	0.0022	0.0014	0.0006	0.0000	0.0000	(0.0000)	0.0014
4 DEMAND DISTRIBUTION TRANSFORMERS	0.0835	0.0034	0.0022	0.0009	0.0020	0.0000	(0.0000)	0.0022
5 CUSTOMER COMPONENTS	0.0194	0.0148	0.0060	0.0310	0.0014	0.0015	0.0007	0.1348
6 CUSTOMER METERS COMPONENT	0.0027	0.0019	0.0020	0.0053	0.0003	0.0008	0.0002	0.0002
7 CUSTOMER SERVICES COMPONENT	0.0022	0.0026	0.0001	0.0000	0.0001	0.0000	(0.0000)	0.0000
8 ACCT 902 - METER READING COMP	0.0047	0.0032	0.0012	0.0001	0.0002	0.0001	0.0000	0.0000
9 ACCT 903 - CUST RECORDS & COLL COMP	0.0080	0.0055	0.0019	0.0156	0.0001	0.0000	0.0033	0.0002
10 CUSTOMER SERVICES EXP COMP	0.0002	0.0001	0.0003	0.0000	0.0000	0.0000	0.0002	0.0002
11 CUSTOMER SALES EXP COMP	0.0002	0.0001	0.0004	0.0001	0.0001	0.0001	0.0001	0.0002
12 CUSTOMER OTHER COMPONENT	0.0015	0.0006	0.0004	0.0005	0.0005	0.0005	0.0005	0.1309
13 TOTAL DELAWARE DISTRIBUTION	0.0353	0.0283	0.0171	0.0362	0.0095	0.0074	0.0008	0.1476
14 CUSTOMER COMPONENT \$/MO/CUST	\$16.04	\$17.82	\$21.45	\$12.55	\$179.93	\$648.36	\$7,702.55	\$117.97

Schedule EPT R-5

**Delmarva Power & Light - Delaware Electric Distribution  
Class Cost of Service Study for the 12 months ending 3/09  
Revised results applying requested ROR**

<b>Customer Class</b>	<b>Rate of Return (%)</b>	
	<b>Filed COSS</b>	<b>Revised COSS</b>
1 <b>Residential</b>	6.34	6.34
2 <b>Residential Non Heating</b>	6.58	6.58
3 <b>Residential Space Heating</b>	5.85	5.85
4 <b>General Service Secondary Small</b>	12.74	12.74
5 <b>Telecommunication Network Service</b>	24.57	24.57
6 <b>General Service Secondary Large</b>	8.63	8.63
7 <b>General Service Primary</b>	6.41	6.41
8 <b>General Service Transmission</b>	43.15	43.15
9 <b>Street Lighting Service</b>	6.84	6.84

Schedule EPT R-6

**Delmarva Power & Light - Delaware Electric Distribution**  
**Class Cost of Service Study for the 12 months ending 3/09**  
**Revised Customer Component Costs applying requested ROR**

<u>Customer Class</u>	<u>Customer Costs- \$/Month/Customer</u>	
	<u>Filed COSS</u>	<u>Revised COSS</u>
1 <b>Residential</b>	15.91	15.82
2 <b>Residential Non Heating</b>	15.53	15.45
3 <b>Residential Space Heating</b>	16.90	16.80
4 <b>General Service Secondary Small</b>	24.25	24.08
5 <b>Telecommunication Network Service</b>	15.13	15.08
6 <b>General Service Secondary Large</b>	205.07	203.04
7 <b>General Service Primary</b>	628.48	625.72
8 <b>General Service Transmission</b>	7,730.32	7,709.15
9 <b>Street Lighting Service</b>	NA	NA